

Application No.: 09/955,223**Docket No.: 30001070-2 US (1509-218)****REMARKS**

The Office Action of October 18, 2005 has been thoroughly studied.

The claims have been amended for clarity, and to provide open-ended coverage, where appropriate.

Applicants traverse the rejection of claims 90, 92, 94-97, 101, 103, 105-107, 110, 112 and 114-116 as being anticipated by or as obvious as a result of Johnston, U.S. Patent 5,287,478. Applicants cannot agree that column 10, lines 48-55 and column 5, line 27 of Johnston disclose the step of creating a code representative of data in a data set that has been written in a recording session between a pair of repositioning commands. Column 10, lines 48-55 of Johnston does not disclose creating a code representative of data in a data set. Instead, this portion of Johnston et al. is concerned with calculating syndromes. As indicated in column 2, lines 40 and 41, a syndrome is an extra frame that is calculated to correct any two bad tracks in a group. The syndromes are calculated as the tracks are read from the tape during reading or read-after-write (RAW). Read-after-write is performed only when writing to a tape. A track that has just written is read, and its error correction codes (C1 ECC) and checksum are calculated to verify that the track has been properly written. For C1 ECC in the tape memory for each block of the track being read, there are stored any non-zero syndromes plus a block number. Hence, column 10, lines 48-55 of Johnston discloses generating codes representative of data errors, rather than a code representative of data. Column 9, line 27 merely indicates user data are always written one group at a time. It is not understood how this particular portion of Johnston et al. has anything to do with creating a code representative of data in a data set.

The Office Action also incorrectly alleges that column 11, lines 18-21 of Johnston et al. discloses incrementing a code counter indicating a count of the number of codes written into

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memory. The Office Action states that writing subcode data and block identifications into a memory space in a track, and appending C1 ECC parity to the data block pairs of each track is the equivalent to incrementing a code counter indicating a count of the number of codes written into memory. It is not at all apparent to Applicants why this is the case. The Examiner must provide rationale for his statement of equivalency.

Applicants cannot agree Johnston discloses the features of claims 95, 106 and 115 that require a further code representative of data in a data set read back from a tape, and comparing the further and original codes to confirm that the data set is valid. The Examiner again relies on column 10, lines 48-55, and column 9, line 27 for this feature. However, as previously discussed, column 10, lines 48-55 concerns error correcting codes (ECC) rather than codes representative of data in a data set read back from a tape.

The Office Action on page 5 incorrectly states Johnston et al., at column 10, lines 48-55, discloses the claim 96 requirement for the comparing and confirming steps of claim 95 be carried out by a controlling software application. The foregoing portion of Johnston et al. does not mention any controlling software application. Instead, the relied upon portion of Johnston et al. merely states that error corrections are applied when reading/writing from the tape. This citation makes no mention of where the request originates.

Applicants cannot agree with the comments concerning claims 97-107 and 116 on page 5 of the Office Action. The Examiner relies on column 5, lines 46-54 to disclose performing, comparing and confirming steps by an external reader able to access and/or display information recorded in memory. In fact, there is no disclosure at column 5, lines 46-54 of comparing and confirming by an external reader able to access and display information recorded in memory. Instead, column 5, lines 46-54 is concerned with a host reading and writing to a tape through a physical tape device. There

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is nothing in this portion of Johnston to indicate the comparison is performed by an external reader able to access and/or display information recorded in memory.

Dependent claims 91, 93, 98-100, 102, 104, 108, 109, 111, 113, 117 and 118 are allowable for the same reasons advanced for the claims upon which they depend. The Gold, Maekawa et al. and Shnelvar patents do not cure the above-noted deficiencies with regard to the claims upon which the foregoing claims depend.

The Gold reference is not eligible as a reference under 35 U.S.C. §103(a) because the present invention and the Gold invention were commonly owned by the same entity at the time the inventions were made. 35 U.S.C. §103(c) precludes the use of Gold as a reference under 35 U.S.C. §103(a), unless Gold is a statutory bar, which it is not. Neither the Gold reference, U.S. Patent 6,701, 450, nor its PCT equivalent, published February 17, 2000, is a statutory bar against the present application, which has a priority date of September 20, 2000. Applicants' priority date was acknowledged by the U.S. Patent and Trademark Office in the first Office Action.

Applicants cannot agree that the features of claims 93, 104 and 113, requiring the memory to include a cartridge memory that differs from the tape, is obvious as a result of Johnston et al. in view of Maekawa et al., U.S. Patent 6,160,679. While Maekawa et al. discloses an auxiliary memory in a cartridge, it would not have been obvious to one of ordinary skill in the art to provide such a structure in Johnston et al. Applicants use an auxiliary memory in a cartridge tape memory to detect tampering with recorded data within sessions from an application/host level, as opposed to a physical recording verification, as disclosed by Johnston.

The rejection of claim 100 based on the combination of Johnston et al. and Shnelvar, U.S. Patent 6,374,266, is wrong. Claim 100 depends on claim 90 and requires a comparison of the codes and number of entries against information held on a secure data base. Most of the portion of

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Shnelvar relied on in the Office Action is concerned with prior art to Shnelvar. This prior art is concerned with processing at a cluster/block level, rather than a session level, as required by claim 90. Hence, one of ordinary skill in the art would not have combined the features of column 5, lines 35-60 with the Johnston et al. arrangement to render obvious the method claim 100. It is not understood how column 6, lines 17-21 of Shnelvar relates to comparing codes and number of entries against information held on a secure data base. Explanation is in order if there is further reliance on this portion of Shnelvar with regard to claim 100.

Claims 120-123 have been added to provide applicants with the protection to which they are deemed entitled. Claim 120 depends on claim 90 and is directed to backing up data of a computer to the data storage tape so that the data set written to the tape is a set of data of the computer being backed up. Support for these limitations is found in Figure 5 and the description thereof. Claim 121 depends on claim 90 and defines steps associated with restoration or validation operations of a data set on a tape of a tape cartridge loaded in the tape drive of claim 90. Claim 122 depends on claim 110 and defines apparatus for restoring or validating operations of a data set on a tape of the tape cartridge loaded in the tape drive of claim 110. Claim 123 depends on claim 122 and indicates the processor arrangement for generating the new code of claim 122 is included in the tape drive of claim 110. Support for the limitations of claims 121-123 is found in Figure 6 and the description thereof. The limitations of claims 120-123 are not found in the art of record.


In view of the foregoing amendments and remarks, favorable reconsideration and allowance is respectfully requested and deemed in order.

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To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 08-2025 and please credit any excess fees to such deposit account.

Respectfully submitted,

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